

HUMAN NPC1L1 PROTEIN, HIS TAG

Cat.#: 11510

Product Name: Human NPC1L1 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: NPC1-like intracellular cholesterol transporter 1; Niemann-Pick C1-like protein 1

Target: NPC1L1

UNIPROT ID: Q9UHC9

Description: Recombinant human NPC1L1 protein with C-terminal 6xHis tag

Background: The protein encoded by this gene is a multi-pass membrane protein. It contains a conserved N-terminal Niemann-Pick C1 (NPC1) domain and a putative sterol-sensing domain (SSD) which includes a YQRL motif functioning as a plasma membrane to trans-Golgi network transport signal in other proteins. This protein takes up free cholesterol into cells through vesicular endocytosis and plays a critical role in the absorption of intestinal cholesterol. It also has the ability to transport alpha-tocopherol (vitamin E). The drug ezetimibe targets this protein and inhibits the absorption of intestinal cholesterol and alpha-tocopherol. In addition, this protein may play a critical role in regulating lipid metabolism. Polymorphic variations in this gene are associated with plasma total cholesterol and low-density lipoprotein cholesterol (LDL-C) levels and coronary heart disease (CHD) risk. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 28.8 kDa after removal of the signal peptide. The apparent molecular mass of NPC1L1-His is approximately 35-55 kDa due to glycosylation.

Molecular Characterization: NPC1L1(Glu22-Ser284) 6xHis tag

Purity: The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

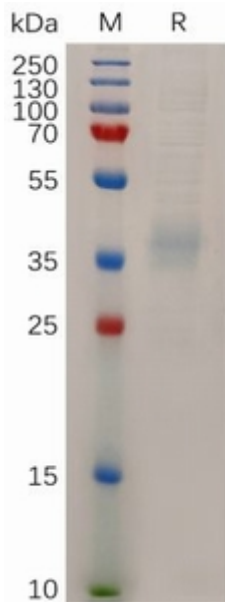


Figure 1. Human NPC1L1 Protein, His Tag on SDS-PAGE under reducing condition.